

REMARKS

Initially, in the Office Action dated February 11, 2004, the Examiner rejects claims 1, 2, 4, 5, 7-13, 15-18, 31, 32, 37, 38 and 41 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,519,886 (Gilbert et al.) in view of U.S. Patent No. 6,240,073 (Reichman et al.). Claims 6, 14 and 33-36 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. and further in view of GSM 04.08 version 4.19.1 (ETS 300,557). Claim 19 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of U.S. Patent No. 5,815,820 (Kiem et al.) and further in view of U.S. Patent No. 4,636,741 (Mitzlaff). Claims 21, 22, 24, 26-30, 39 and 42 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. and further in view of GSM 04.08. Claim 25 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. and GSM 04.08 and further in view of U.S. Patent No. 6,169,884 (Funk).

By the present response, Applicants have submitted new claims 43-50 for consideration by the Examiner and assert that these claims do not contain any prohibited new matter. Claims 1, 2, 4-19, 21, 22, 24-39, and 41-50 remain pending in the present application.

Response to Arguments

In the Response to Arguments section of the Office Action, the Examiner now asserts that Gilbert et al. teaches monitored criterion being the number of bursts, the

controlling of the data transmission of a transmitter by monitoring the transmitter temperature criteria at Fig. 2, temperature sensor 246, control 210, TX 242 and power amplifier 240. However, these portions of Gilbert et al. merely disclose a block diagram about of a communication device that includes a data transmission block 240 with a temperature sensor 246 for measuring the temperature of heat-sensitive components and/or modules which may be affected by transmissions, an RF power amplifier that is monitored by the temperature sensor 246 and a transmitter 242 which is controlled by a controller 210. This is not monitoring at least one criterion associated with heat generated by a transmitter wherein one of the at least one monitored criterion includes the number of transmitted data bursts in a frame, as recited in the claims of the present application. These portions of Gilbert et al. merely disclose monitoring the temperature of a power amplifier. This has nothing to do with monitoring the number of transmitted data bursts in a frame, as recited in the claims of the present application.

Moreover, the Examiner asserts that Gilbert et al. discloses monitoring the number of bursts for changing the transmission protocol by segmenting of the message into smaller packets or longer delayed period, to reduce periods of continued transmission at col. 4, lines 40-48 and col. 1, lines 38-50. However, these portions of Gilbert et al. merely disclose that modification of the operation of the data communication protocol is performed by executing protocol operation modification instructions stored in a memory of the communication device where the instructions may result in the segmenting of the message into smaller packets so as to reduce

periods of continuous transmission. However, this is not monitoring of the number of bursts for changing the transmission protocol, as recited in the claims of the present application. As noted in previously, Gilbert et al. discloses monitoring temperature information for the power amplifier or other temperature sensitive modules. The Examiner further asserts that Reichman et al. teaches the transmitter and monitoring and changing of the amount of transmission data for a transmitter. However, as has been noted in Applicants' previously-filed responses and will be discussed again later, Reichman et al. relates to a return link for a satellite communication system and does not relate at all to the limitations in the claims of the present application.

35 U.S.C. §103 Rejections

Claims 1, 2, 4, 5, 7-13, 15-18, 31, 32, 37, 38 and 41 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. Gilbert et al. and Reichman et al. have been discussed in Applicants' previously filed response. Applicants re-assert all arguments submitted in previously-filed responses and provide the following additional remarks.

Regarding claims 1, 11, 31 and 41, submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious a mobile phone transmitter temperature control arrangement in which the transmitter operation is monitored by measuring the number of data bursts that are transmitted in a frame to give an indication of the transmitter temperature and/or heat output, and then using the monitored number of data bursts to control or regulate the transmitter operation accordingly. As noted in previously-filed responses, Gilbert et

al. discloses a method for controlling the temperature of a wireless communication device. Gilbert et al. does not disclose or suggest manipulation of the operation of the actual power amplifier or transmitter and, therefore, cannot be regarded as disclosing a method or apparatus for controlling a transmitter, as recited in the claims of the present application. The Examiner admits that Gilbert et al. does not disclose or suggest monitoring of the criterion of number of bursts in a frame for controlling at least one output of a transmitter, but asserts that Reichman et al. discloses these limitations at col. 5, lines 15-59, col. 6, lines 19-43. However, as has been noted previous, these portions of Reichman et al. merely disclose the criteria for determining whether the first communication scheme or the second communication scheme is used for transmission based on the content and amount of data generated. This is not a transmitter operation being monitored by measuring the number of data bursts that are transmitted and using the monitored number of data bursts to control the transmitter operation accordingly, as recited in the claims of the present application.

Reichman et al. does not disclose or suggest anything related to the number of transmitted data bursts in a frame being monitored during a transmission. Further, Reichman et al. does not disclose or suggest anything related to measuring of frames. Reichman et al. discloses only the measurement regarding the size of the whole data message as a precursor to transmission so that an appropriate transmission rate can be determined (see col. 5, lines 35-46 and col. 9, lines 52-64). The limitations in the claims of the present application are related to power

management during transmission. In contrast, Reichman et al. is related to bandwidth and speed of transmission depending on the size of the data to be transmitted.

Reichman et al. discloses measuring the size of the whole data message (see col. 5, lines 35-46) before transmission in order that the best transmission mode can be determined. The mechanism disclosed in Reichman et al. is not consistent with the operation as recited in the limitations of the present invention, since the present invention relates to a dynamic solution in which the transmission is continually monitored in order to keep track of how many data bursts are being transmitted. Therefore, if the system determines that too high a level of data bursts are being transmitted (compared to some predetermined thresholds) then it controls the transmitter to lower the level of data burst transmissions, otherwise, if it continued to transmit at the original unchecked rate, there is a serious risk that the transmitter would overheat and thus break down. Reichman et al. does not solve this problem. For example, for a given transmission, if there was a danger of the transmitter overheating occurring at the beginning of the transmission, then Reichman et al. would not be able to detect this and therefore would be of no help whatsoever. In contrast, according to the limitations in the claims of the present application, this overheating is detected and thus steps can be taken to prevent the transmitter from overheating.

Applicants submit that there would be no motivation for one skilled in the relevant art to combine Reichman et al. with Gilbert et al. since Reichman et al. is

not related at all to the present application. Gilbert et al. discloses a communication device having a particular portion subject to an increase in temperature resulting from the transmissions, whereas Reichman et al. relates to the field of satellite communications and has nothing to do with TDMA radio communication networks in which different users are separated by employing multiple frequencies divided up into multiple time slots of a communication frame, as in the present application. Reichman et al. merely relates to deciding which type of communication means should be used for transmitting a given message data based on the amount of data and content of data that is to be sent. Message data to be sent is first quantified prior to transmission so that the appropriate communication mechanism (rate) can be assigned for the transmission of that message data. If the amount of data to be transmitted requires only a low transmission rate, than the transmission mechanism uses short bursts messages in a random access transmission method, while those messages requiring a higher transmission rate utilize a channel assignment method (see col. 4, lines 58-65). Regardless of which communication scheme is used, Reichman et al. does not disclose or suggest anything related to the possibility that transmission at this scheme (or rate) might lead to overheating of the transmitter. Reichman et al. merely chooses the transmission scheme and transmits at the determined rate, regardless of the heat generated. Clearly, these references teach away from each other, and there would be no motivation for one skilled in the art to combine these references. Further, the combination fails to achieve the claimed invention.

Regarding claims 2, 4, 5, 7-10, 12, 13, 15-18, 32, 37 and 38 and new claims 43, 44, 47 and 49, Applicants submit that these claims are dependent on one of independent claims 1, 11 and 31 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. For example, none of the cited references disclose or suggest where the monitoring is carried out during a transmission.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 1, 2, 4, 5, 7-13, 15-18, 31, 32, 37, 38, 41, 43, 44, 47 and 49 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 6, 14, 33-36 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. and further in view of ETS 300,557. Applicants have discussed the deficiencies of ETS 300,557 in Applicants' previously-filed responses. Applicants respectfully traverse these rejections and submit that these claims are dependent on one of independent claims 1, 11 and 31 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. Applicants submit that ETS 300,557 does not overcome the substantial defects noted previously regarding Gilbert et al. and Reichman et al. For example, Applicants submit that none of the cited references disclose or suggest where the maximum available power output of the transmitter is decreased by changing the power classmark of the portable radio communication apparatus.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 6, 14 and 33-36 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 19 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Kiem et al. and further in view of Mitzlaff. Applicants have discussed the deficiencies of these references in Applicants' previously-filed responses. Further, Applicants have tried to help the Examiner better understand the deficiencies of Gilbert et al. in this response. Neither Kiem et al. nor Mitzlaff overcome the substantial defects noted previously regarding Gilbert et al. Moreover, as was noted in Applicants' previously-filed responses, the Examiner has misinterpreted the Mitzlaff references. Mitzlaff does not disclose or suggest anything related to monitoring a transmission power level and determining if this level is above a predetermined level, as recited in the claims of the present application. Mitzlaff discloses determining if the power amplifying circuit is in a portable transceiver and therefore adjusting the power level accordingly. This is not monitoring a transmission power, or comparing a monitored transmission power level with a predetermined level, as recited in the claims of the present application.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 19 and new claim 45, dependent there from, of the present

application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

Claims 21, 22, 24, 26-30, 39 and 42 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al. and further in view of ETS 300,557. Applicants have already discussed the deficiencies of each of these references and respectfully traverse these rejections.

Regarding claims 21, 39 and 42, Applicants reassert and reiterate the same arguments made previously regarding independent claim 1. Specifically, none of the cited references disclose or suggest monitoring at least one criterion associated with heat generated by a transmitter where the at least one monitored criterion comprises the number of transmitted data bursts in a frame. Applicants submit that ETS 300,557 does not disclose or suggest this limitation in the claims of the present application, and does not overcome the substantial defects noted previously regarding Gilbert et al. and Reichman et al.

Regarding claims 22, 24 and 26-30 and new claims 46, 48 and 50, Applicants submit that these claims are dependent on independent claim 21 and, therefore, are patentable at least for the same reasons noted regarding this independent claim. For example, Applicants submit that none of the cited references disclose or suggest where the monitoring step is carried out during a transmission.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 21, 22, 24, 26-30, 39, 42, 46, 48 and 50 of the

present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 25 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Gilbert et al. in view of Reichman et al., GSM 4.08 and further in view of Funk. Applicants have discussed the deficiencies of these references and respectfully traverse these rejections. Applicants submit that claim 25 is dependent on independent claim 21 and, therefore, is patentable at least for the same reasons noted regarding this independent claim. Applicants submit that neither GSM 04.08 nor Funk overcome the substantial defects noted previously regarding Gilbert et al. and Reichman et al. For example, none of the cited references disclose or suggest where if the monitored criterion exceeds a predetermined limit then the power limit of the transmitter is decreased.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 25 of the present application. Applicants respectfully request that this rejection be withdrawn and that this be allowed.

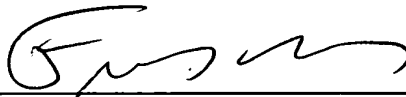
In view of the foregoing amendments and remarks, Applicants submit that claims 1, 2, 4-19, 21, 22, 24-39 and 41-50 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

U.S. Application No. 09/342,843

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 367.39585X00).

Respectfully submitted,

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